

REMARKS/ARGUMENTS

Applicants' attorney thanks the Examiner for her comments and thoughtful analysis of the present application. Claims 1-69 are presented for the Examiner's consideration. Claims 53-59, 61-62 and 64-68 are withdrawn. Claims 1 and 5 have been amended to include the feature of a flexible substrate. Support for this amendment can be found on page 11 lines 2-3 and page 24 lines 1-2. Claim 6 has been amended to correct a grammatical error. Claims 45 and 46 have been amended to exhibit proper dependency on claim 44. Claim 69 has been canceled.

Pursuant to 37 C.F.R. § 1.111, reconsideration of the present application in view of the foregoing amendments and the following remarks is respectfully requested.

By way of the Office Action mailed April 17, 2006, the Examiner restricted the claims into three groups. Group I includes claims 1-51 and 69. Group II includes claims 52-62. Group III includes claims 63-68. On March 28, 2006, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-51 and 69. This election is affirmed with traverse. In particular, the restriction between Group I and Group II is improper. Group II is not a combination/subcombination as suggested by the Examiner. Group II is merely a further definition of the invention presented in Group I and is not a separate and distinct invention requiring a separate search. This is exemplified by the Examiner as she has classified both Group I and Group II in the same class and subclass (i.e., class 604, subclass 387), thus demonstrating that a separate search is in fact not necessary. Applicants respectfully urge the Examiner to withdraw the restriction between Group I and Group II.

In addition, it is noted that notwithstanding the Restriction requirement, the Examiner has proceeded with examining claims 52, 60 and 63 on the merits. Therefore, these claims have not

been withdrawn and Applicants have addressed the Examiner's rejections of these claims as presented.

By way of the Office Action mailed April 17, 2006, the Examiner has objected to the drawings as being unclear. Although the Examiner has not indicated what is unclear about the drawings, Applicants are herewith including formal drawings. No new matter has been added.

By way of the Office Action mailed April 17, 2006, the Examiner has objected to the title of the invention as being not descriptive. Applicants disagree with the Examiner that the title is not descriptive as the current title "Gecko-Like Fasteners for Disposable Articles" is in fact brief, technically accurate and descriptive of the invention, thus meeting the requirements of 37 C.F.R. 1.72 and MPEP § 606. However, the Examiner has suggested the new title of "Nanofabricated Gecko-Like Fasteners with Adhesive Hairs for Disposable Absorbent Articles" and in order to progress prosecution, Applicants have amended the title to reflect the Examiner's suggestion.

By way of the Office Action mailed April 17, 2006, the Examiner rejected claims 3-5, 52, 60 and 63 under 35 U.S.C. § 112, second paragraph, for allegedly being indefinite. This rejection is respectfully traversed to the extent that it may apply to the presently presented claims.

As to claim 3, the Examiner has alleged that the term "of about 3 or greater" is a relative term which renders the claim indefinite. Applicants respectfully disagree. The term "greater" is a mathematical expression readily recognized by one of ordinary skill in the art to mean "more than," and the term "of about 3 or greater" sets a lower limit of "about 3" and suggests that the ratio can be more than about 3. For example, a ratio of 200 would be within the claim, while a ratio of 0.1 would be outside of the claim. For at least this reason, the rejection of this claim has been overcome, and Applicants respectfully request that the rejection of claim 3 under 35 U.S.C. § 112, second paragraph be withdrawn.

As to claim 4, the Examiner has alleged that the term "of 10 nanoNewtons or greater" is a relative term which renders the claim indefinite. Applicants respectfully disagree. The term "greater" is a mathematical expression readily recognized by one of ordinary skill in the art to mean "more than," and the term "of 10 nanoNewtons or greater" sets a lower limit of "about 10" and suggests that the average adhesive force can be more than about 10. For example, an average adhesive force of 2000 nanoNewtons would be within the claim, while an average adhesive force of 0.1 nanoNewtons would be outside of the claim. For at least this reason, the rejection of this claim has been overcome, and Applicants respectfully request that the rejection of claim 4 under 35 U.S.C. § 112, second paragraph be withdrawn.

As to claims 5, 52 and 63, the Examiner has alleged that the term "greater than about 0.05 microns" is a relative term which renders the claim indefinite. Applicants respectfully disagree. The term "greater" is a mathematical expression readily recognized by one of ordinary skill in the art to mean "more than," and the term "greater than about 0.05 microns" sets a lower limit of "about 0.05 microns" and suggests that the diameter can be more than about 0.05 microns. For example, a diameter of 50 microns would be within the claim, while a diameter of 0.001 microns would be outside of the claim. For at least this reason, the rejection of these claims has been overcome, and Applicants respectfully request that the rejection of claims 5, 52 and 63 under 35 U.S.C. § 112, second paragraph be withdrawn.

As to claim 60, the Examiner has alleged that the term "less than 50 microns" is a relative term which renders the claim indefinite. Applicants respectfully disagree. The term "less than" is a mathematical term readily recognized by one of ordinary skill in the art and the term "less than 50 microns" sets an upper limit of "50 microns" and suggests that the thickness can be less than 50 microns. For example, a thickness of 1 micron would be within the claim, while a thickness of 100 microns would be outside of the claim. In addition, one of ordinary skill in the art would readily recognize that while the term "less than 50 microns" approaches zero, the term does not include zero since the film would not exist at that point. For at least this reason, the rejection of this claim has been overcome, and Applicants respectfully request that the rejection of claim 60 under 35 U.S.C. § 112, second paragraph be withdrawn.

By way of the Office Action mailed April 17, 2006, the Examiner noted that "the 'nanofabricated attachment means for fastening' invokes the 'means for' language of 35 USC 112, 6th paragraph." This statement is respectfully traversed to the extent that it may apply to the presently presented claims. Under the three-prong analysis described in MPEP § 2181, part (C) requires that the phrase "means for" must not be modified by sufficient structure, material or acts for achieving the specified function. Therefore, claims in Applicants' application which cite structure, such as adhesive hairs, as well as other structural properties of the adhesive hairs, should not invoke 35 U.S.C. 112, 6th paragraph.

By way of the Office Action mailed April 17, 2006, the Examiner made a claim language interpretation, stating that the "term 'gecko-like fastener' in claims 5, 52 and 63 are interpreted to be 'an adhesive material comprising minute hairs rising from a substrate capable of conforming to and adhering to an opposing surface' as defined by Applicant's instant specification page 5, lines 20-24." This statement is respectfully traversed to the extent that it may apply to the presently presented claims.

First, Applicants note that the Examiner utilized the definition for "gecko-like adhesive" for "gecko-like fastener." Second, the Examiner has failed to include the second part of Applicants' definition, which states that "Further description of the nature of gecko-like adhesives are set forth herein." With the inclusion of the further description found in the specification and figures, one of ordinary skill in the art would recognize that a gecko-like fastener of the present invention would not include a conventional hook and loop fastener.

By way of the Office Action mailed April 17, 2006, the Examiner rejected claims 1-29, 40-42, 44-46, 49-51 and 69 under 35 U.S.C. § 103 as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over PCT Publication No. WO 01/49776A3 to Full et al. ("Full") in view of U.S. Patent No. 6,127,018 to Akeno et al. ("Akeno"). This rejection is respectfully traversed to the extent that it may apply to the presently presented claims.

Independent claims 1 and 5 have been amended to include the feature of a *flexible* substrate. Support for this amendment can be found on page 11 lines 2-3 and page 24 lines 1-2. Claim 69 has been canceled.

In accordance with MPEP § 2142, obviousness must be established by meeting three criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the references must teach or suggest all the claim limitations.

Full teaches applying setae to a *hard and rigid* substrate surface. This substrate requirement by Full is exemplified in the specification and in the figures, which include: the end of a #2 insect pin; a semiconductor substrate; a silicon substrate; and a wafer, all of which are hard and rigid substrates as of the filing date of Full. (See e.g., WO 01/49776 A3 page 7 lines 25-26, page 13 line 3, page 15 line 9, Figures 10A-10C, and Figure 13.) In contrast to Full, amended independent claims 1 and 5 of Applicants' invention include the feature of a *flexible* substrate. The combination of Akeno with Full does not overcome the deficiencies of Full. There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Full or to combine the teachings of Full and Akeno to arrive at Applicants' invention. Thus, at least the first requirement of MPEP § 2142 is not present. In addition, there is no teaching by the combination of references to dispose the hairs onto a flexible substrate. Thus, at least the second requirement of MPEP § 2142 (i.e., there must be a reasonable expectation of success) is also not present. Applicants wish to highlight that the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 4899 (Fed. Cir. 1991). For at least these reasons, the Applicants submit that this rejection has been overcome.

With respect to claims 2-4, 6-29, 40-42, 44-46 and 49-51, these claims are allowable since they are each dependent upon a patentable independent claim. See e.g., *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). For at least these reasons, Applicants respectfully request that this rejection of claims 1-29, 40-42, 44-46, 49-51 and 69 under 35 U.S.C. § 103 be withdrawn.

By way of the Office Action mailed April 17, 2006, the Examiner rejected claims 1 and 69 under 35 U.S.C. § 103 as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over PCT Publication No. WO 01/49776A3 to Full et al. ("Full") in view of U.S. Patent No. 4,585,450 to Rosch et al. ("Rosch"). This rejection is respectfully traversed to the extent that it may apply to the presently presented claims.

Independent claim 1 has been amended to include the feature of a *flexible* substrate. Support for this amendment can be found on page 11 lines 2-3 and page 24 lines 1-2. Claim 69 has been canceled.

In accordance with MPEP § 2142, obviousness must be established by meeting three criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the references must teach or suggest all the claim limitations.

Full teaches applying setae to a *hard and rigid* substrate surface. This substrate requirement by Full is exemplified in the specification and in the figures, which include: the end of a #2 insect pin; a semiconductor substrate; a silicon substrate; and a wafer, all of which are hard and rigid substrates as of the filing date of Full. (See e.g., WO 01/49776 A3 page 7 lines 25-26, page 13 line 3, page 15 line 9, Figures 10A-10C, and Figure 13.) In contrast to Full, amended independent claim 1 of Applicants' invention includes the feature of a *flexible* substrate. The combination of Rosch with Full does not overcome the deficiencies of Full. There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Full or to combine the teachings of Full and Rosch to arrive at Applicants' invention. Thus, at least the first requirement of MPEP § 2142 is not present. In addition, there is no teaching by the combination of references to dispose the hairs onto a flexible substrate. Thus, at least the second requirement of MPEP § 2142 (i.e., there must be a reasonable expectation of success) is also not present. Applicants wish to highlight that the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not

based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 4899 (Fed. Cir. 1991). For at least these reasons, the Applicants submit that this rejection has been overcome. For at least these reasons, Applicants respectfully request that this rejection of claims 1 and 69 under 35 U.S.C. § 103 be withdrawn.

By way of the Office Action mailed April 17, 2006, the Examiner rejected claims 30-32 under 35 U.S.C. § 103 as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over PCT Publication No. WO 01/49776A3 to Full et al. ("Full") in view of U.S. Patent No. 6,127,018 to Akeno et al. ("Akeno") and further in view of U.S. Publication No. US 2001/0023568 to Schutt ("Schutt"). This rejection is respectfully traversed to the extent that it may apply to the presently presented claims.

Independent claim 5, from which dependent claims 30-32 ultimately depend, has been amended to include the feature of a *flexible* substrate. Support for this amendment can be found on page 11 lines 2-3 and page 24 lines 1-2.

In accordance with MPEP § 2142, obviousness must be established by meeting three criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the references must teach or suggest all the claim limitations.

Full teaches applying setae to a *hard and rigid* substrate surface. This substrate requirement by Full is exemplified in the specification and in the figures, which include: the end of a #2 insect pin; a semiconductor substrate; a silicon substrate; and a wafer, all of which are hard and rigid substrates as of the filing date of Full. (See e.g., WO 01/49776 A3 page 7 lines 25-26, page 13 line 3, page 15 line 9, Figures 10A-10C, and Figure 13.) In contrast to Full, amended independent claim 5 of Applicants' invention includes the feature of a *flexible* substrate. The combination of Schutt and Akeno with Full does not overcome the deficiencies of Full. There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Full or to combine the teachings of Full, Akeno and Schutt to

arrive at Applicants' invention. Thus, at least the first requirement of MPEP § 2142 is not present. In addition, there is no teaching by the combination of references to dispose the hairs onto a flexible substrate. Thus, at least the second requirement of MPEP § 2142 (i.e., there must be a reasonable expectation of success) is also not present. Applicants wish to highlight that the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 4899 (Fed. Cir. 1991). For at least these reasons, the Applicants submit that this rejection has been overcome. Thus, Applicants submit that claims 30-32 are allowable since they are each ultimately dependent upon a patentable independent claim. See e.g., *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). For at least these reasons, Applicants respectfully request that this rejection of claims 30-32 under 35 U.S.C. § 103 be withdrawn.

By way of the Office Action mailed April 17, 2006, the Examiner rejected claims 33-39 and 43 under 35 U.S.C. § 103 as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over PCT Publication No. WO 01/49776A3 to Full et al. ("Full") in view of U.S. Patent No. 6,127,018 to Akeno et al. ("Akeno") and further in view of U.S. Publication No. US 2003/0100880 to Magee et al. ("Magee"). This rejection is respectfully traversed to the extent that it may apply to the presently presented claims.

Independent claim 5, from which dependent claims 33-39 and 43 depend, has been amended to include the feature of a *flexible* substrate. Support for this amendment can be found on page 11 lines 2-3 and page 24 lines 1-2.

In accordance with MPEP § 2142, obviousness must be established by meeting three criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the references must teach or suggest all the claim limitations.

Full teaches applying setae to a *hard and rigid* substrate surface. This substrate requirement by Full is exemplified in the specification and in the figures, which include: the end of a #2 insect

pin; a semiconductor substrate; a silicon substrate; and a wafer, all of which are hard and rigid substrates as of the filing date of Full. (See e.g., WO 01/49776 A3 page 7 lines 25-26, page 13 line 3, page 15 line 9, Figures 10A-10C, and Figure 13.) In contrast to Full, amended independent claim 5 of Applicants' invention includes the feature of a *flexible* substrate. The combination of Magee and Akeno with Full does not overcome the deficiencies of Full. There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Full or to combine the teachings of Full, Akeno and Magee to arrive at Applicants' invention. Thus, at least the first requirement of MPEP § 2142 is not present. In addition, there is no teaching by the combination of references to dispose the hairs onto a flexible substrate. Thus, at least the second requirement of MPEP § 2142 (i.e., there must be a reasonable expectation of success) is also not present. Applicants wish to highlight that the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 4899 (Fed. Cir. 1991). For at least these reasons, the Applicants submit that this rejection has been overcome. Thus, Applicants submit that claims 33-39 and 43 are allowable since they are each dependent upon a patentable independent claim. See e.g., *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). For at least these reasons, Applicants respectfully request that this rejection of claims 33-39 and 43 under 35 U.S.C. § 103 be withdrawn.

By way of the Office Action mailed April 17, 2006, the Examiner rejected claims 47-48 under 35 U.S.C. § 103 as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over PCT Publication No. WO 01/49776A3 to Full et al. ("Full") in view of U.S. Patent No. 6,127,018 to Akeno et al. ("Akeno") and further in view of U.S. Patent No. 4,299,223 to Cronkite ("Cronkite") and further in view of U.S. Patent No. 5,279,604 to Robertson et al. ("Robertson"). This rejection is respectfully traversed to the extent that it may apply to the presently presented claims.

Independent claim 5, from which dependent claims 47-48 depend, has been amended to include the feature of a *flexible* substrate. Support for this amendment can be found on page 11 lines 2-3 and page 24 lines 1-2.

In accordance with MPEP § 2142, obviousness must be established by meeting three criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the references must teach or suggest all the claim limitations.

Full teaches applying setae to a *hard and rigid* substrate surface. This substrate requirement by Full is exemplified in the specification and in the figures, which include: the end of a #2 insect pin; a semiconductor substrate; a silicon substrate; and a wafer, all of which are hard and rigid substrates as of the filing date of Full. (See e.g., WO 01/49776 A3 page 7 lines 25-26, page 13 line 3, page 15 line 9, Figures 10A-10C, and Figure 13.) In contrast to Full, amended independent claim 5 of Applicants' invention includes the feature of a *flexible* substrate. The combination of Cronkite, Robertson and Akeno with Full does not overcome the deficiencies of Full. There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Full or to combine the teachings of Full, Akeno, Cronkite and Robertson to arrive at Applicants' invention. Thus, at least the first requirement of MPEP § 2142 is not present. In addition, there is no teaching by the combination of references to dispose the hairs onto a flexible substrate. Thus, at least the second requirement of MPEP § 2142 (i.e., there must be a reasonable expectation of success) is also not present. Applicants wish to highlight that the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 4899 (Fed. Cir. 1991). For at least these reasons, the Applicants submit that this rejection has been overcome. Thus, Applicants submit that claims 47-48 are allowable since they are each ultimately dependent upon a patentable independent claim. See e.g., *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). For at least these reasons, Applicants respectfully request that this rejection of claims 47-48 under 35 U.S.C. § 103 be withdrawn.

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed in this response, Applicants' undersigned attorney requests a telephone interview with the Examiner.

Appl. No. 10/747,923
Amdt. dated August 17, 2006
Reply to Office Action of April 17, 2006

For at least the reasons stated above, Applicants sincerely believe that this Patent Application is now in condition for allowance and, thus, respectfully request early allowance.

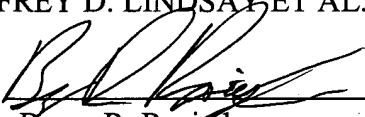
Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc.
deposit account number 11-0875.

The undersigned may be reached at: (920) 721-4405.

Respectfully submitted,

JEFFREY D. LINDSAY ET AL.

By



Bryan R. Rosiejka

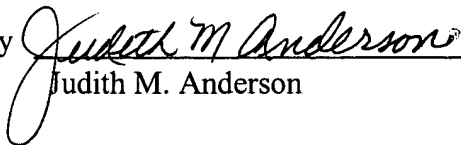
Registration No.: 55,583

Attorney for Applicant(s)

CERTIFICATE OF MAILING

I, Judith M. Anderson, hereby certify that on August 17, 2006 this document is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By



Judith M. Anderson

Amendments to the Drawings:

The attached sheets of drawings include formal drawings for FIG 1; 2A; 2B; 3; 4; 5; 6; 7; 8; 9A; 9B; 9C; 10A; 10B; 11; 12A; and 12B. The sheets, which include FIG 1; 2A; 2B; 3; 4; 5; 6; 7; 8; 9A; 9B; 9C; 10A; 10B; 11; 12A; and 12B replace the original sheets including FIG 1; 2A; 2B; 3; 4; 5; 6; 7; 8; 9A; 9B; 9C; 10A; 10B; 11; 12A; and 12B. No new matter has been added.

Attachment: Replacement Sheets